

**FIG. 7**

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graph TD
    A([A]) -- 112 --> 118[MONITOR REAR WHEEL SPEED  
MONITOR REAR BRAKE PRESSURE  
DETECT ROUGH ROAD]
    118 -- 114 --> 120[CALCULATE REAR BRAKE PRESSURE  
RATE (RBP RATE)]
    118 -- 124 --> 122[CALCULATE VEHICLE SPEED  
(VS EST) AS A FUNCTION OF  
REAR WHEEL SPEED]
    118 -- 126 --> 128[CALCULATE REAR WHEEL  
ACCELERATION (RWA EST)]
    118 -- 130 --> 132[CALCULATE VEHICLE  
ACCELERATION (VA EST)]
    122 -- 134 --> 136[CALC RDP TERM  
AS PROPORTIONAL  
DIFFERENCE BETWEEN  
VA EST AND RWA EST]
    122 -- 138 --> 140[CALC RDP  
ENTRY POINT]
    122 -- 142 --> 144[CALC RPC  
ENTRY POINT]
    122 -- 146 --> 148[CALC RPC TERM AS  
PROPORTIONAL AND  
DERIVATIVE DIFFERENCE  
BETWEEN VS EST AND  
THE REAR WHEEL SPEED]
    136 -- 150 --> 152{LVW OR GVW ?}
    152 -- 154 --> 156[INHIBIT  
RDP]
    152 -- 158 --> 160[ROUGH ROAD]
    160 -- YES --> 162[MODIFY  
RPC ENTRY POINT]
    160 -- NO --> 164[RPC ENTRY POINT]
    156 -- 166 --> RWA_EST[RWA EST]
    162 -- 168 --> VA_EST[VA EST]
    164 -- 170 --> RPC_ENTRY_POINT[RPC ENTRY POINT]
    148 -- 172 --> RPC_TERM[RPC TERM]
    148 -- 174 --> VS_EST[VS EST]
    148 -- 176 --> RPB_RATE[RBP RATE]
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The flowchart illustrates the logic for determining the RDP entry point. It begins with a start point 'A' leading to a monitoring block (118) which monitors rear wheel speed, rear brake pressure, and detects rough roads. This block branches into three paths: one to calculate rear brake pressure rate (RBP RATE) (120), one to calculate vehicle speed (VS EST) as a function of rear wheel speed (122), and one to calculate rear wheel acceleration (RWA EST) (124). The 124 path also leads to calculate vehicle acceleration (VA EST) (130). From 122, the flow goes to calculate the RDP term as a proportional difference between VA EST and RWA EST (136), calculate the RDP entry point (140), calculate the RPC entry point (142), and calculate the RPC term as a proportional and derivative difference between VS EST and the rear wheel speed (146). The 136 path leads to a decision diamond (150) asking 'LVW OR GVW?'. If 'YES', it leads to 'INHIBIT RDP' (156), which then outputs RWA EST. If 'NO', it leads to a decision diamond (160) asking 'ROUGH ROAD?'. If 'YES', it leads to 'MODIFY RPC ENTRY POINT' (162), which then outputs VA EST. If 'NO', it leads to the output of the RPC entry point (142), which is the RPC ENTRY POINT. The 146 path leads to the output of the RPC term (148), which is the RPC TERM. The 142 path leads to the output of the VS EST (148), which is the VS EST. The 146 path also leads to the output of the RBP RATE (148), which is the RBP RATE.